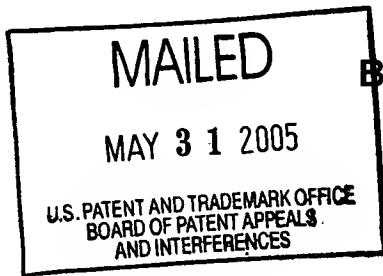


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 20

**UNITED STATES PATENT AND TRADEMARK OFFICE**



**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Ex parte BRUCE M. RADL

Appeal No. 2005-0474  
Application No. 09/966,484

HEARD: May 3, 2005

Before Barrett, Ruggiero, and Dixon, Administrative Patent Judges.  
Ruggiero, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-6, 8, and 9. Claim 7 has been allowed and, at page 7 of the Answer, the Examiner indicates that claim 4 contains allowable subject matter. Accordingly, only the Examiner's rejection of claims 1-3, 5, 6, 8, and 9 is before us on appeal.

The claimed invention relates to an electro-optical apparatus including a lens, a CCD image sensor having a predetermined filter pattern of color-sensitive pixels, and a spectrally dispersive element disposed between the lens and the CCD image sensor.

According to Appellant (specification, page 2), the claimed electro-optical device operates to reduce moire<sup>1</sup> or frequency aliasing.

Representative claim 1 is reproduced as follows:

1. Electro-optical apparatus comprising,  
lens apparatus,  
a CCD image sensor having a predetermined filter pattern of color-sensitive pixels,  
and a spectrally dispersive element between said lens apparatus and said CCD.

The Examiner relies on the following prior art:

Langworthy	4,654,698	Mar. 31, 1987
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Claims 1-3, 5, 6, 8, and 9 stand finally rejected under 35 U.S.C. § 102(b) as being anticipated by Langworthy.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Briefs<sup>1</sup> and Answer for the respective details.

#### OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner and the evidence of anticipation relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellant's arguments set forth in the Briefs along with the Examiner's

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<sup>1</sup> The Appeal Brief was filed April 5, 2004 (Paper No. 11). In response to the Examiner's Answer dated May 5, 2004 (Paper No. 12), a Reply Brief was filed July 8, 2004 (Paper No. 15), which was acknowledged and entered by the Examiner as indicated in the communication dated October 26, 2004 (Paper No. 16).

rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer. It is our view, after consideration of the record before us, that the Langworthy reference fully meets the invention as set forth in claims 1-3, 5, 6, 8, and 9. Accordingly, we affirm.

At the outset, we note that Appellant's suggested claim grouping (Brief, page 2) asserts the independent patentability of claim 4, which, as stated supra, the Examiner has indicated as being allowable. The remaining claims on appeal are argued together as a group with Appellants' arguments being directed solely to features which are set forth in independent claim 1. Accordingly, we will select independent claim 1 as the representative claim for all the claims on appeal, and claims 2, 3, 5, 6, 8, and 9 will stand or fall with claim 1. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

Turning to the merits of the Examiner's rejection, it is well settled that anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

At page 4 of the Answer, the Examiner indicates how the various limitations in appealed claim 1 are read on the disclosure of Langworthy. In particular, the Examiner points to the illustration in Langworthy's Figure 13 along with the accompanying description beginning at column 6, line 6, of Langworthy. As asserted by the Examiner, Langworthy discloses, as required by representative claim 1, a lens 10, a CCD image sensor 20, and a spectrally dispersive element (dichroic mirrors 72, 74, 76, and 78) located between the lens and the CCD image sensor.

In our view, the Examiner's analysis is sufficiently reasonable that we find that the Examiner has at least satisfied the burden of presenting a prima facie case of anticipation. The burden is, therefore, upon Appellant to come forward with evidence and/or arguments which persuasively rebut the Examiner's prima facie case. Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived [see 37 CFR § 41.37(c)(1)(vii)].

Appellant's arguments in response assert that the Examiner has not shown how each of the claimed features are present in the disclosure of Langworthy so as to establish a case of anticipation. In particular, Appellant contends (Brief, pages 5-7; Reply Brief, page 2) that, unlike the dichroic multiple mirror reflector structure of Langworthy, the language of claim 1 requires a single dispersive element.

After careful review of the Langworthy reference in light of the arguments of record, however, we are in agreement with the Examiner's position as stated in the Answer. Aside from the fact that, as pointed out by the Examiner (Answer, pages 5 and 6), there is no language in claim 1 requiring a "single" dispersive element, we fail to see why the dichroic mirror structure of Langworthy would not be considered "a dispersive element" as claimed. It is noteworthy that Langworthy characterizes the disclosed dichroic mirror structure as "an optical device" (Langworthy, column 2, line 51 and column 6, line 12), a device which, in accordance with Appellant's definition of a spectrally dispersive element (specification, page 3), disperses white light into a spectrum including red, green and blue portions.

We also make the observation that, although the Examiner made specific reference to the structure illustrated in Figure 13 of Langworthy, other drawing figures in Langworthy describe structure which, in our view, clearly and unambiguously satisfies even Appellant's unduly restrictive interpretation of "a dispersive element."<sup>2</sup> For example, Figure 12 of Langworthy describes a single color separation grating 70 which separates incoming light into red and blue portions.

Lastly, we have reviewed Summit Technology, 363 F.3d 1219, 70 USPQ2d 1276 (Fed. Cir. 2004) cited in support of Appellant's position at page 5 of the Brief. We find little

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<sup>2</sup> It is apparent that the Examiner relied on the structure described and illustrated in Figure 13 of Langworthy because of the disclosed feature of a Bayer checkerboard filter pattern 22 on the image sensor 20, a structural feature which, in actuality, is not present in representative claim 1.


relevance between the discussed issue of whether a physically combined series of pulses across a cornea infringes a claim which requires "a light spot" and the particular subject matter involving a spectrally dispersive element at issue in the instant application on appeal.

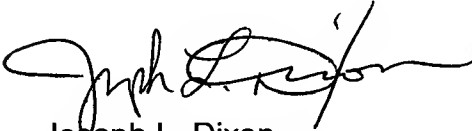
In view of the above discussion, since the Examiner's prima facie case of anticipation has not been overcome by any convincing arguments from Appellant, the Examiner's 35 U.S.C. § 102(b) rejection of representative claim 1, as well as claims 3, 5, 6, 8, and 9 which fall with claim 1, is sustained. Therefore, the decision of the Examiner rejecting claims 1-3, 5, 6, 8, and 9 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv)(effective September 13, 2004; 69 Fed. Reg. 49960 (August 12, 2004); 1286 Off. Gaz. Pat. and TM Office 21 (September 7, 2004)).

AFFIRMED

  
Lee E. Barrett  
Administrative Patent Judge

  
Joseph F. Ruggiero  
Administrative Patent Judge

  
Joseph L. Dixon  
Administrative Patent Judge

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